

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of managing information input via a sensor device and a position-coding pattern printed on a product, comprising:

reading coordinates of said sensor device based on movement of said sensor device relative to said position-coding pattern, said position-coding pattern including marks that code coordinates on a reference surface, the coordinates of which define an imaginary surface that includes all marks which the position coding pattern codes, said imaginary surface being said reference surface including position-coding pattern portions that are used to create a plurality of product types, divided into at least a first region and a second region said position-coding pattern printed on said product including at least a first sub-pattern portion and a second sub-pattern portion; and

executing an information management function based on coordinates read from said first sub-pattern portion~~region~~, said information management function managing information formed by coordinates read from said second sub-pattern portion~~region~~

wherein said sensor device determines a characteristic of at least one of said first sub-pattern portion and said second sub-pattern portion based on at least one coordinate read from said

product and definition data stored in a memory of said sensor device.

2. (Original) A method as claimed in claim 1, wherein said information management function is one of: storing information, sending information, and converting information.

3. (Currently Amended) A method as claimed in claim 1, wherein said information management function is a send function by which said sensor device sends at least part of coordinates from a send area of said first ~~region~~ sub-pattern portion to a database device which allocates a particular send address to said send area, which is used to send ~~message~~ said information to a recipient.

4. (Original) A method as claimed in claim 3, wherein said send address is communicated to said sensor device, which sends a request to a computer device defined by said send address to execute a program in said computer device.

5. (Currently Amended) A method as claimed in claim 4, wherein said program analyzes coordinates read from said second ~~region~~ sub-pattern portion and sends a request to said sensor device to transfer ~~the message~~ said information, the program generating a message according to said information.

6. (Original) A method as claimed in claim 5, wherein said program generates an e-mail which is sent to a recipient.

7. (Currently Amended) A method as claimed in claim 6, wherein the e-mail address for said recipient is included in ~~the message~~ said information.

8. (Original) A method as claimed in claim 5, wherein said program generates a function for performing an electronic commerce service.

9. (Currently Amended) A method as claimed in claim 1, wherein said reference surface comprises at least one of a send region, a note region, a general region, an application domain region, a private region and a direct-managed region.

10. (Currently Amended) A system for managing information ~~input via a sensor device and a position coding pattern printed on a product~~, comprising:

a sensor device which comprises a coordinate ~~reading~~  
~~means~~ reader for reading coordinates of said sensor device based on movement of said sensor device relative to ~~said~~ a position-coding pattern printed on a product, said position-coding pattern

including ~~marks,~~ marks that code the coordinates on a reference of  
~~which define an imaginary surface,~~ said reference surface that  
~~includes all marks which the~~ including position-coding pattern  
~~portions that are used to create a plurality of product types,~~ said  
~~position-coding pattern printed on said product including at least~~  
~~a first sub-pattern portion and a second sub-pattern portion codes,~~  
~~said imaginary surface being divided into at least a first region~~  
~~and a second region;~~ and a memory storing definition data; and

an information management means ~~manager~~ for executing an  
information management function based on coordinates read from said  
first ~~region~~ sub-pattern portion, said information management  
function managing information formed by coordinates read from said  
second ~~region~~ sub-pattern portion;

wherein said sensor device determines a characteristic of at  
least one of said first sub-pattern portion and said second sub-  
pattern portion based on at least one coordinate read from said  
product and said definition data stored in said memory.

11. (Currently Amended) A system as claimed in claim 10,  
wherein said information management function executed by said  
information ~~management means~~ manager is one of: storing  
information, sending information, and converting information.

12. (Currently Amended) A system as claimed in claim 10, wherein said information management function executed by said information ~~management function means~~manager is a send function which enables said sensor device to send at least part of coordinates from a send area of said first ~~region~~sub-pattern portion to a database device which allocates a particular send address to said send area, which is used to send ~~message~~said information to a recipient.

13. (Original) A system as claimed in claim 12, wherein said send address is communicated to said sensor device, which sends a request to a computer device defined by said send address to execute a program in said computer device.

14. (Currently Amended) A system as claimed in claim 13, wherein said program analyzes coordinates read from said second ~~region~~sub-pattern portion and sends a request to said sensor device to transfer ~~the message~~said information, the program generating a message according to said information.

15. (Original) A system as claimed in claim 14, wherein said program generates an e-mail which is sent to a recipient.

16. (Currently Amended) A system as claimed in claim 15, wherein the e-mail address for said recipient is included in ~~the~~ messagesaid information.

17. (Original) A system as claimed in claim 14, wherein said program generates a function for performing an electronic commerce service.

18. (Currently Amended) A system as claimed in claim 10, wherein said reference surface comprises at least one of a send region, a note region, a general region, an application domain region, a private region and a direct-managed region.

19.-24. (Canceled).

25. (New) A method as claimed in claim 1, wherein said definition data defines the extent of each of a plurality of addressable sub-pattern units in said reference surface.

26. (New) A method as claimed in claim 1, wherein each of said coordinates defines a multiple bit code, and wherein said definition data identifies a section of said multiple bit code as being indicative of an addressable sub-pattern unit.

27. (New) A method as claimed in claim 1, wherein said sensor device forms said information from said coordinates read from said second sub-pattern portion.

28. (New) A method as claimed in claim 1, wherein said sensor device forms said information in local coordinates within said second sub-pattern portion.

29. (New) A method as claimed in claim 28, wherein each of said coordinates defines a multiple bit code, each of said local coordinates being formed based upon a predetermined part of said multiple bit code.

30. (New) A method as claimed in claim 1, wherein said sensor device identifies said information management function based upon said definition data.

31. (New) A method as claimed in claim 1, wherein said definition data defines the extent of said first sub-pattern portion.

32. (New) A method as claimed in claim 1, wherein each of said coordinates defines a multiple bit code, wherein said

definition data associates one part of said multiple bit code with said first sub-pattern portion.

33. (New) A method as claimed in claim 32, wherein said definition data associates another part of said multiple bit code with an area within said first sub-pattern portion, said area being indicative of said information management function.

34. (New) A system as claimed in claim 10, wherein said definition data defines the extent of each of a plurality of addressable sub-pattern units in said reference surface.

35. (New) A system as claimed in claim 10, wherein each of said coordinates defines a multiple bit code, and wherein said definition data identifies a section of said multiple bit code as being indicative of an addressable sub-pattern unit.

36. (New) A system as claimed in claim 10, wherein said sensor device forms said information from said coordinates read from said second sub-pattern portion.

37. (New) A system as claimed in claim 10, wherein said sensor device forms said information in local coordinates within said second sub-pattern portion.



38. (New) A system as claimed in claim 37, wherein each of said coordinates defines a multiple bit code, each of said local coordinates being formed based upon a predetermined part of said multiple bit code.

39. (New) A system as claimed in claim 10, wherein said sensor device identifies said information management function based upon said definition data.

40. (New) A system as claimed in claim 10, wherein said definition data defines the extent of said first sub-pattern portion.

41. (New) A system as claimed in claim 10, wherein each of said coordinates defines a multiple bit code, wherein said definition data associates one part of said multiple bit code with said first sub-pattern portion.

42. (New) A system as claimed in claim 41, wherein said definition data associates another part of said multiple bit code with an area within said first sub-pattern portion, said area being indicative of said information management function.